NUREG-1107
ADDENDUM

RCSLK9: Reactor Coolant System Leak Rate Determination for PWRs

User's Guide: Installation Procedures

Manuscript Completed: August 1988
Date Published: December 1988

D. C. Kirkpatrick, R. W. Woodruff, P. Bell

Division of Emergency Preparedness and Engineering Response
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

BEST COPY AVAILABLE

Background

RCSLK9 is a computer program developed for use on the IBM PC to analyze the leak tightness of the primary coolant system for any pressurized water reactor. This Addendum to the original report, NUREG-1107, RCSLK9: Reactor Coolant System Leak Rate Determination for PWRs, User's Guide, was prepared to provide more detail regarding installation procedures. The following information should be inserted between paragraphs one and two on page 7: under Section 4, "Creation and Function of RCSLK9 Software."

RCSLK9 was written to run with IBM Personal Computer DOS, Version 2.00 or 2.10, and IBM Personal Computer BASIC, Version D2.00 or D2.10. The diskette supplied with User's Guide contains the RCSLK9 application program but not the DOS or BASIC programs. For RCSLK9 to run properly a working diskette must be prepared for a two floppy drive IBM/PC or an IBM/XT.

Installation Procedures for a Two Floppy Drive IBM/PC

The RCSLK9 diskette distributed by the NRC cannot be used until DOS and BASIC have been installed on the diskette. It is advisable to keep the original RCSLK9 diskette as it is and create a new bootable RCSLK9 working diskette by using the following procedure:

- Start the PC with the DOS diskette in drive A.
- Insert a blank diskette that will become the working diskette in drive B.
- at the A>prompt type:

  FORMAT B:/S/V

  This will format the working diskette, copy the DOS operating system files (IBMIO.COM,IBMDOS.COM,COMMAND.COM), and prompt for a volume label to which the response is RCSLK9.
  When the diskette in drive B is formatted, a message will appear on the screen saying FORMAT COMPLETE, SYSTEM transferred, and # bytes (on diskette, used by system, and available).
- At the A> prompt type:

  COPY A:RASIC.COM B:

BEST COPY AVAILABLE

- Remove the DOS diskette from drive A and insert the original RCSLK9 diskette, with write protect tab in place in drive A.
- Leave the newly formatted diskette in drive B.
- At the A> prompt type:

  COPY A:*.* B:

  This will copy all the files from the original RCSLK9 diskette to the working diskette. The names of the files will appear on the screen as each file is copied. When the A> prompt appears on the screen, the copying is complete.
- Remove the original RCSLK9 diskette from drive A and put it away for safe keeping.
- Be sure the red light is out on both drives and the A> prompt is on the screen. Remove the diskettes and turn off the PC.
  Label your new RCSLK9 working diskette "RCSLK9 PROGRAM" using only a felt tip pen to write the label. Follow the directions in section 6 (page 15) to run the RCSLK9 program using the working diskette.

Installation Procedures for an IBM/XT with One Floppy Disk Drive and One Hard Disk Drive

The RCSLK9 diskette distributed by the NRC cannot be used until DOS and BASIC have been installed on the diskette. It is advisable to keep the original RCSLK9 diskette as it is and create a new bootable RCSLK9 working diskette to be used on the floppy drive by using the following procedure:

- The software configuration must be such that DOS and BASIC reside in the root directory on the C drive. If they do not reside in the root then other steps need to be taken. Call NRC/ITS FTS-492-4160 for assistance. If they do reside in the root then proceed.

BEST COPY AVAILABLE

- Start the PC with drive A empty.
- At the C> prompt type:

  CD \

  This command (CHANGE DIRECTORY) will set the current directory of the default drive (C) to its root directory.
- At the C> prompt type:

  FORMAT A:/S/V

  The screen will direct you to insert a disk. Insert a blank diskette that will become the working diskette in drive A. Follow the screen instruction and depress any key to continue. The screen, in some cases, will list a table of FORMAT choices. If this happens, choose FORMAT A:/S/V/9/2.

  This will format the working diskette, copy the DOS operating system files (IBMBIO.COM,IBMDOS.COM,COMMAND.COM), and prompt for a volume label to which the response is RCSLK9. Be patient. It takes awhile to complete formatting.
- At the C> prompt type:

  COPY C:BASIC.COM A:
- At the C> prompt type:

  MD\RCSLK9

  This command (MAKE DIRECTORY) creates a sub-directory, named RCSLK9, on the C drive into which the files distributed on the floppy diskette accompanying this document will be temporarily stored.
- At the C> prompt type:

  CD\RCSLK9

BEST COPY AVAILABLE

This command (CHANGE DIRECTORY) will set the current directory of the default drive (C) to the newly created sub-directory RCSLK9.

- At the C> prompt, remove the working diskette from drive A, insert into drive A the RCSLK9 diskette that was distributed with this document (with write protect tab in place), and type:

  COPY A:*.* C:

  This will copy all the files from the RCSLK9 floppy diskette to the C drive to the sub-directory named RCSLK9. The names of the files will appear on the screen as each file is copied. When the C> prompt appears on the screen, the copying is complete.

- Remove the original RCSLK9 floppy diskette from drive A and put it away for safe keeping.

- Insert the working diskette in drive A and type:

  COPY *.* A:

  The names of the files will appear on the screen as each file is copied.

- At the C> prompt type:

  ERASE *.*

  The system will ask "are you sure?" Answer YES.

  This will erase all the files in the RCSLK9 sub-directory.

- At the C> prompt type:

  CD\

  This will return the system to the root directory.

- At the C> prompt type:

  RD\RCSLK9

  This will erase the RCSLK9 sub-directory name.

BEST COPY AVAILABLE

- At the C> prompt the installation is complete. Be sure the red light is out on both drives. Remove the diskette from drive A. Turn off the PC. Label your new RCSLK9 working diskette "RCSLK9 PROGRAM" using only a felt tip pen to write the label. Follow the directions in Section 6 (page 15) to run the RCSLK9 program using the working diskette.

BEST COPY AVAILABLE

NRC FORM 335 (2-84) NRCM 1102, 3201, 3202

U.S. NUCLEAR REGULATORY COMMISSION

BIBLIOGRAPHIC DATA SHEET

SEE INSTRUCTIONS ON THE REVERSE

1. REPORT NUMBER (Assigned by TIDC, add Vol. No., if any)
NUREG-1107
Addendum

2. TITLE AND SUBTITLE
RCSLK9: Reactor Coolant System Leak Rate Determination For PWRs
User's Guide: Installation Procedures

3. LEAVE BLANK

4. DATE REPORT COMPLETED
MONTH: December | YEAR: 1986

5. AUTHOR(S)
R. A. Holland
D. C. Kirkpatrick
R. W. Woodruff

6. DATE REPORT ISSUED
MONTH: December | YEAR: 1986

7. PERFORMING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
Division of Emergency Preparedness & Engineering Response
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

8. PROJECT/TASK/WORK UNIT NUMBER

9. FIN OR GRANT NUMBER

10. SPONSORING ORGANIZATION NAME AND MAILING ADDRESS (Include Zip Code)
same

11a. TYPE OF REPORT
Technical

b. PERIOD COVERED (Inclusive dates)

12. SUPPLEMENTARY NOTES

13. ABSTRACT (200 words or less)
This addendum to the original report, published December 1984, was prepared to provide more detail regarding installation procedures for RCSLK9 computer program, developed for use on the IBM PC to analyze the leak tightness of the primary coolant system for any pressurized water reactor.

14. DOCUMENT ANALYSIS - a. KEYWORDS/DESCRIPTORS
RCSLK9 computer program
PWRs
reactor coolant system
Independent Meansurements Program
leak rate measurement

b. IDENTIFIERS/OPEN-ENDED TERMS

15. AVAILABILITY STATEMENT
Unlimited

16. SECURITY CLASSIFICATION
(This page) Unclassified
(This report)

17. NUMBER OF PAGES

18. PRICE

BEST COPY AVAILABLE